



Cambridge International AS & A Level

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INFORMATION TECHNOLOGY

9626/31

Paper 3 Advanced Theory

May/June 2021

1 hour 45 minutes

You must answer on the question paper.

No additional materials are needed.

INSTRUCTIONS

- Answer **all** questions.
- Use a black or dark blue pen.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.
- You may use an HB pencil for any diagrams, graphs or rough working.
- Calculators must **not** be used in this paper.

INFORMATION

- The total mark for this paper is 90.
- The number of marks for each question or part question is shown in brackets [].

This document has **16** pages. Any blank pages are indicated.

1 An Information Technology (IT) Manager is considering storing company data in the cloud.

(a) Explain what is meant by storing data in the cloud.

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(b) Explain why the IT Manager could be worried about storing data in the cloud.

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- 5 A manager of a library is considering introducing an updated computer system for lending out books. Library users will be asked to complete a questionnaire about the current system.

Evaluate, by weighing up the advantages and disadvantages, the use of questionnaires for gathering information in this scenario.

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6 The introduction of 5G cellular communication systems will provide increased bandwidth for users.

(a) 5G cellular communication systems will enable video delivery to users to be more reliable.

Describe **two** other improvements that 5G will be able to provide.

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(b) Describe **two** drawbacks of the introduction of 5G cellular communication systems.

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- 7 A hospital is to replace its database management system (DBMS) for storing patient records with a new system.

Analyse the effectiveness of the phased implementation method to install the new DBMS.

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8 Describe how a blog enables social networking to take place.

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11 Hubs and switches are networking devices.

Compare and contrast how these devices carry out their roles in a network.

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